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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 10/519,027 | 12/23/2004 | Minoru Ohyama | 26475U | 7686 |
| 20529 | 7590 | 05/31/2006 | EXAMINER | |
| NATH & ASSOCIATES 112 South West Street Alexandria, VA 22314 | | | PHAM, VAN T | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2627 | |

DATE MAILED: 05/31/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/519,027

Applicant(s)

OHYAMA, MINORU

Examiner

VAN T. PHAM

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 April 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-27, 29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) 25, 26 and 28-31 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-24 and 27 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 23 December 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date. _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. Applicant's election without traverse of Species c (claims 15-24 and 27) in the reply filed on 4/20/2006 is acknowledged.

Drawings

2. Figures 1-5 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 15-24 and 27 are rejected under 35 U.S.C. 103(a) as being anticipated by Sato Katsutoshi (JP 2001-076370) in view of Katayama et al. (US 6,980,505).

Regarding claim 15, Sato discloses an optical pickup comprising: a primary laser light source for emitting a primary laser light having a first wavelength and having sufficient power for recording (see Fig. 1, element 2); an integrated device further comprising a secondary laser

light source for emitting a secondary laser light having a second wavelength that is longer than the first wavelength and having sufficient power for recording as well as light receiving means for receiving light of the primary and secondary laser lights (see Fig. 1, element 4); and laser light optical path separating elements that are a light beam splitter further comprising a first surface into which the first laser light emitted from the primary laser light source is injected, a second surface from which the primary laser light is emitted to the information recording medium side and into which return path light of the primary laser light from the information recording medium side is injected and a third surface from which the return path light is emitted to the integrated device side (see Fig. 1, element 5). However, Sato does not disclose that a laser light optical path separating elements that are a polarized light beam splitter that has polarization selectivity in respect of the primary laser light having the first wavelength and no polarization selectivity in respect of the secondary laser light having the second wavelength.

Katayama, discloses a separating elements that are a polarized light beam splitter that has polarization selectivity in respect of the primary laser light having the first wavelength and no polarization selectivity in respect of the secondary laser light having the second wavelength (see Fig. 4 and col. 5).

It would have been obvious to a person of ordinary skill in the art at the time the invention was provided a separating elements in Sato as suggested by Katayama, the motivation being in order to increasing the S/N ratio and decreasing the manufacturing cost (see Katayama cols. 1-2).

Regarding claim 16, the combination of Sato and Katayama, discloses the optical pickup according to claim 15 wherein the laser light optical path separating elements pass all primary

laser light having P polarization in relation to thereto, while reflecting all primary laser light having S polarization and reflecting all of the secondary laser light regardless of the polarization thereof (see Katayama Fig. 4).

Regarding claim 17, the combination of Sato and Katayama, discloses the optical pickup according to claim 15 wherein the laser light optical path separating elements pass all of the primary laser light having P polarization in relation thereto, while reflecting all of the primary laser light having S polarization and passing all of the secondary laser light regardless of the polarization thereof (see Katayama Fig. 4).

Regarding claim 18, the combination of Sato and Katayama, discloses the optical pickup according to claim 15 wherein the laser light optical path separating elements have a fourth surface that passes, from among the primary laser light, P polarized light components in relation to this polarized light beam splitter, passes from 5 percent to 20 percent of S polarized light components while reflecting the remainder, reflects all of the secondary laser light regardless of the direction of polarization thereof and emits from 5 percent to 20 percent of the primary laser light to light quantity detecting elements in the forward direction thereto (see Katayama col. 5 and Fig. 4).

Regarding claim 19, the combination of Sato and Katayama, discloses the optical pickup according to claim 15 wherein the laser light optical path separating elements of this optical pickup pass primary laser light emitted from the primary laser light source toward the information recording medium side and reflect return path light of the primary laser light from the information recording medium to the integrated device side, reflect the secondary laser light from the secondary laser light source to the information recording medium side and reflect the

secondary laser light from the information recording medium to the integrated device side, and the light receiving elements receive light that is return path light of the primary laser light or the secondary laser light from the information recording medium, emitted from the laser light optical path separating elements (see Sato Fig. 1, elements 2-5).

Regarding claim 20, the combination of Sato and Katayama, discloses the optical pickup according to claim 19 wherein the laser light optical path separating elements function, in relation to wavelengths of the primary laser light, to pass P polarized light and to reflect S polarized light, and function, in relation to wavelengths of the secondary laser light, as a total light reflecting prism reflecting both P polarized light and S polarized light (see Katayama Fig. 4 and col. 5).

Regarding claim 21, the combination of Sato and Katayama, discloses the optical pickup according to claim 19 wherein the primary laser light source, the integrated device and the laser light optical path separating elements are disposed such that the optical axes connecting there between are positioned on the same plane, the primary laser light source is disposed such that the direction of polarization of the primary laser light is parallel to that plane and the secondary laser light source is disposed such that the direction of polarization of the secondary laser light is perpendicular to that plane (see Sato Fig. 1).

Regarding claim 22, the combination of Sato and Katayama, discloses the optical pickup according to claim 18 wherein a collimator lens that collimates the primary laser light and the secondary laser light traveling from the laser light optical path separating elements to the objective lens is disposed between the laser light optical path separating elements and objective lens (see Sato Fig. 1).

Regarding claim 23, the combination of Sato and Katayama, discloses the optical pickup according to claim 15 wherein the laser light optical path separating elements reflect the primary laser light emitted from the primary laser light source to the information recording medium side, pass return path light of the primary laser light from the information recording medium to the integrated device side, pass the secondary laser light from the secondary laser light source to the information recording medium side and pass return path light of the secondary laser light from the information recording medium to the integrated device side, and the light receiving means receives return path light of the primary laser light source and the secondary laser light source from the information recording medium, emitted from the laser light optical path separating elements (see Sato Fig. 1).

Regarding claim 24, the combination of Sato and Katayama, discloses the optical pickup according to claim 19 wherein the laser light optical path separating elements function, in relation to wavelengths of the primary laser light, to pass P polarized light and to reflect S polarized light, and function, in relation to wavelengths of the secondary laser light, as a light passing member that passes both P polarized light and S polarized light (see Katayama Fig. 4 and col. 5).

Regarding claim 27, Sato discloses the optical pickup according to claim 15 wherein the primary laser light has a wavelength of the 650 nm band and that the secondary laser light has a wavelength of the 780 nm band (see Sato [0005] and Katayama col. 5).

Cited References

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

The cited references relate to:

- a. Optical head apparatus including two light sources and one photodetector (Katayama et al. US 6,980,505).
 - b. Optical pickup apparatus (Hineno et al. US 5,428,596).
 - c. Optical pickup device (Sofue US 5,392,274).
 - d. Optical recording and reproducing apparatus (Tanaka et al. US 5,513,164).
6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to VAN T. PHAM whose telephone number is 571-272-7590. The examiner can normally be reached on Monday-Thursday from 9:00am-6:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wayne Young can be reached on 571-272-7582. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

VP



WAYNE YOUNG
SUPERVISORY PATENT EXAMINER